ABSTRACT

The present invention is directed to novel formulations of modified antibodies and to methods of producing the same. The modified antibodies formulated according to the present invention each comprise an antibody fragment covalently attached to at least one nonproteinaceous polymer, such as poly(ethyleneglycol). CDP870 is an example of one such modified antibody, a therapeutic modified antibody. One method disclosed herein involves the removal from a solution of the modified antibody of molecules capable of adversely affecting the stability or solubility of the modified antibody after lyophilization (e.g., by dialysis or diafiltration), followed by lyophilization of the modified antibody. Another method involves concentration of a modified antibody solution by equilibrium dialysis. The methods of the present invention can be used to produce formulations suitable for use in subcutaneous and parenteral injection, including high concentration formulations.